

## REMARKS

The Applicant respectfully requests entry of the above amendment and reconsideration in view of the amendment and the following remarks.

Regarding the amended claims:

Claim 1 has been further amended to restore antecedent basis for signal value, and to add antecedent basis for "signal portion", and to correct the grammar of the added limitations.

Claim 6 has been further amended to add the limitation that, in addition to the value of s and t being different, "the values that s can assume are all different than the values that t can assume".

Claim 12 has been further amended to restore antecedent basis for signal value, and to add antecedent basis for "signal portion", and to improve the grammar of the added material, and to add the limitation that, in addition to the value of s and t being different, "the values that s can assume are all different than the values that t can assume".

Claim 13 has been further amended to add the limitation that, in addition to the value of s and t being different, "the values that s can assume are all different than the values that t can assume".

Claim 14 has been further amended to correct the grammar.

Claim 15 has been further amended to correct the grammar.

Claim 23, line 29, has been amended to cancel "from other code words" as unnecessary.

Claim 48, last portion has been amended to eliminate "or".

Claim 51 has been amended to add the limitation that, in addition to the value of s and t being different, "the values that s can assume are all different than the values that t can assume".

Claims 54 and 59 has changed "in the bit string which are located at p predetermined non-consecutive positions relative to the code word" to --located at p predetermined non-consecutive

positions in a portion of the bit string adjacent to the code word--.

Claim 57 has been amended to add --the bits being in some cases contained in another code word and in other cases contained in a sync word-- and canceled "or by a part of the sync word in combination with an adjacent code word" at the end of the claim.

Claim 86, 87, 89, 90, and 91 have been amended to change "combined with either an adjacent sync signal portion or an adjacent information signal portion" to --combined with an adjacent signal portion being in some cases an adjacent sync signal portion and in other cases an adjacent information signal portion--.

Claims 92, 93, 95, 96, 97, 102 and 103 have been amended to change "s and t are different in value" to --the values that s can assume are all different than the values that t can assume--.

Claim 104 has been amended to cancel "thereby allowing one information signal portion belonging to the at least one group of the second type to represent a plurality of information words among which the respective information word is distinguishable, in which the code words contained in different sets associated with the coding states of the second type are mutually distinguishable on the basis of the logical values of bits at p predetermined non-consecutive bit positions in the code words"

Claims 105 and 106 have each been amended to cancel "another code word adjacent to the code word being converted, in which the code words contained in different sets associated with the coding states of the second type are mutually distinguishable on the basis of" and add --an adjacent portion-- before "the bit string,".

New independent claims 117, 119, 120, 122, 123 and 125 are based on amended claim 1 and are allowable for the same reasons. New dependent claims 118, 121, and 124 are dependent on claims 117, 120 and 123 respectively and are allowable for at least the same reasons.

New dependent claim 126 is based in figure 9 of the original application. Baldwin does not disclose mutually different sync

portions.

The examiner should consider the claims in the reexamination of Patent 5,696,505 which has claims which are similar to some of the claims of this application.

Regarding the rejections of the claims, applicant respectfully traverses the assertions in the previous office actions.

In response to the rejection of claims 1-3, 6-7 and 9-116 under 35 USC 102(b) for allegedly being anticipated by US patent 4,851,837 to Baldwin, the citation does not identically disclose all the limitations of the claims.

More specifically, with regard to claim 1, Baldwin does not suggest "the following signal portions containing the p bit cells ... are in some cases an adjacent information signal portion and in other cases are an adjacent sync signal portion" as in claim 1. In Baldwin sync signal portions do not determine the information word represented by a code word belonging to a group of the second type.

With regard to claim 13, Baldwin does not suggest "the information signal portions from the at least one group of the first type end in s bit cells having a same logical value, the information signal portions from the at least one group of the second type end in t bit cells having a same logical value, wherein s and t can assume different values and the values that s can assume are all different than the values that t can assume, and in that t is greater than or equal to 2 and smaller than or equal to 5" as in claim 13. Baldwin does not show or discuss any value of t, but a hindsight analysis of figure 10 indicates that t is in the range of 2 to 6.

With regard to claim 22, Baldwin does not suggest "the delivery of each of the code words belonging to a group of the first type establishes a first type of coding state determined only by the group to which that code word belongs" as in claim 22. In Baldwin there is no coding state that is determined only by the group of the first type to which the code word belongs.

With regard to claims 23 and 33, Baldwin does not suggest

"code words contained in different sets associated with the coding states of the second type are mutually distinguishable on the basis of the logical values of bits at p predetermined non-consecutive bit positions in the code words" as in claims 23 and 33.

With regard to claim 34, Baldwin does not suggest "state establishing means being arranged for establishing a first type of coding state for each delivered code word belonging to a group of a first type, which state is determined by the group from which the delivered code word belongs" as in claim 34. In Baldwin there is no coding state that is determined by the group to which the code word belongs. In Baldwin there is no coding state that is determined only by the group of the first type to which the code word belongs.

With regard to claim 45, Baldwin does not suggest "each information signal portion belonging to a second one of the groups of information signal portions uniquely establishing an information word depending upon the logical value of p predetermined non-consecutive bit cells in an information signal portion adjacent to the each information signal portion belonging to the second group" as in claim 45.

With regard to claim 48, Baldwin does not suggest "the adjacent signal portion containing the at least one bit cell are in some cases an adjacent information signal portion and in other case are an adjacent sync signal portion" as in claim 48. In Baldwin adjacent sync signal portions do not determine the information word represented by a code word.

With regard to claims 54 and 59, Baldwin does not suggest "the converting means convert a code word to an information word also depending on the logical values of bits located at p predetermined non-consecutive positions in a portion of the bit string adjacent to the code word" as in claims 54 and 59.

With regard to claim 57, Baldwin does not suggest "the converting means convert a code word to an information word also depending on the logical values of bits in the bit string which are located at p predetermined positions relative to the code word, the

bits being in some cases contained in another code word and in other cases contained in a sync word" as in claim 57. In Baldwin adjacent sync signal portions do not determine the information word represented by a code word.

With regard to claims 86, 87, 89, 90, and 91, Baldwin does not suggest "a unique information word is established by the information signal portions of the second group combined with an adjacent signal portion being in some cases an adjacent sync signal portion and in other cases an adjacent information signal portion" as in claims 86, 87, 89, 90, and 91. In Baldwin adjacent sync signal portions do not determine the information word represented by an information signal portion.

With regard to claims 92, 93, 95 and 97 "the information signal portions from the at least one group of the first type end in  $s$  bit cells having a same logical value, the information signal portions from the at least one group of the second type end in  $t$  bit cells having a same logical value, in which  $s$  and  $t$  can assume different values and the values that  $s$  can assume are different than all the values that  $t$  can assume, and  $t$  is greater than or equal to 2 and smaller than or equal to 5" as in claims 92, 93, 95 and 97.

With regard to claims 96, 102 and 103 "the converting means convert a code word to an information word also depending on another portion of the bit stream adjacent to the code word being converted if the information signal portions end in  $t$  bit cells having a same logical value, and not if the information signal portions end in  $s$  bit cells having a same logical value, where  $s$  and  $t$  can assume different values, the values that  $s$  can assume are all different than the values that  $t$  can assume, and  $t$  is greater than or equal to 2 and smaller than or equal to 5" as in claims 96 102 and 103.

With regard to claim 98, Baldwin does not suggest "a first type of coding state for each delivered code word belonging to a group of a first type, which state is determined only by the group

to which the delivered code word belongs" as in claim 98. Baldwin does not disclose a state that is determined only by the group of the first type to which a delivered code word belongs.

With regard to claim 100, Baldwin does not suggest "each information signal portion belonging to a group of the second type in combination with the logical values of  $p$  bit cells at predetermined non-consecutive positions in a following signal portion represent a unique information word" as in claim 100.

With regard to claim 101, Baldwin does not suggest "each information signal portion belonging to a second one of the groups of information signal portions uniquely establishing an information word depending upon the logical values of  $p$  bit cells at predetermined non-consecutive positions in a signal portion adjacent to the each information signal portion belonging to the second group" as in claim 101.

With regard to claims 104, 105 and 106, Baldwin does not suggest "each information signal portion belonging to a group of the second type in combination with the logical values of  $p$  bit cells at predetermined positions in a following signal portion represent a unique information word" as in claims 104, 105 and 106.

All the other rejected claims are dependent on one of the above distinguished claims and are allowable at least for the same reasons.

The claims are definite and distinguished from the citations and Applicant respectfully requests the allowance of all claims.

The Commissioner is hereby authorized to credit any overpayment or charge any fee (except the issue fee) including fees for any required extension of time, to Account No. 14-1270.

Respectfully submitted,

By Michael E. Belk  
Michael E. Belk, Reg. 33,357  
Patent Attorney  
(914) 333-9643

n14746r.am2.ber.doc